



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,069	01/08/2004	Clifford J. Weber	00322.0008.CPUS01	5428
22930	7590	02/18/2010		
HOWREY LLP - East C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DR, SUITE 200 FALLS CHURCH, VA 22042-2924			EXAMINER POLLOCK, GREGORY A	
			ART UNIT 3695	PAPER NUMBER
			MAIL DATE 02/18/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/753,069	Applicant(s) WEBER ET AL.	
	Examiner GREG POLLOCK	Art Unit 3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-59 and 95-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-59 and 95-97 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to claims filed 11/06/2009 and Applicant's request for reconsideration of application 10/753069 filed 11/06/2009. The amendment contains amended claims 56-59 and 95-97. Claims 1-55, 60-94, and 98-110 have been canceled. As such, claims 56-59 and 95-97 have been examined with this office action.

Terminal Disclaimer

2. The terminal disclaimer filed on 11/06/2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application Number 12/198,003 filed August 25, 2008 and Application Number 09/815,589 filed March 23, 2001 the expiration dates of the full statutory terms of prior patent numbers 7,571,130, 7,305,362, 7,099,838, and 6,941,280 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Abstract

3. The abstract of the disclosure is objected to because of the use of self-evident clauses. The Abstract reads "The invention provides systems and methods for intra-day trading of actively managed exchange traded funds (AMETFs). The invention provides creation and redemption structures for AMETF shares that allow arbitrage, intra-day value estimations for AMETF

Art Unit: 3695

shares, and hedging portfolios for hedging risks associated with trading AMETF shares, all without requiring disclosure of the specific assets underlying the AMETF.”. The abstract should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," and in this case “The invention provides”. Correction is required. See MPEP § 608.01(b). Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. The phrase “substantially the same” in **claims 56, 57, 59, 95, and 97** is a relative term which renders the claim indefinite. The term “substantially the same” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

See MPEP § 2173.05(b).
6. **Claim 56** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The preamble of Claim 56 indicates that the claim is directed toward “a traded fund: However, the body of the claim appear to be directed toward a method as indicated by such actions words as “determining”, “storing”, “using”, and “calculating”..

Art Unit: 3695

A claim is considered indefinite if it does not apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F. 2d 1200, 1217 (Fed. Cir. 1991). A claim is considered indefinite if it does not apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F. 2d 1200, 1217 (Fed. Cir. 1991).

7. **Claims 56-59 and 95-97** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements and/or essential steps, such omission amounting to a gap between the between the necessary structural connections and/or steps. See MPEP § 2172.01. The omitted structural cooperative relationships are: the structural elements responsible for performing action within each of the method limits which result in the intended result of “the proxy portfolio does not reveal the assets of the traded fund and the identities of the assets of the traded fund are not disclosed to an investor who trades shares of the traded fund on a secondary market, and wherein the assets of the traded fund are not publicly disclosed on a daily basis”. Claims 56-59 and 95-97 list method steps but do not recite what structural components perform each of the method steps. As such, the intended result appears to be a design choice decided by a human (i.e. a human element chooses not to disclose the assets of a traded fund). To correct this deficiency, it must be clear which disclosed component is performing each and every method step. Further, if the method step is performed by software, it must be made clear that the

Art Unit: 3695

software resides on a physical media and when read by a processor executes the method steps (all of which requires support in the specification).

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 57-59 and 95-97** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed toward the statutory category of a method (process), however based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a statutory § 101 process must (1) be tied to a particular machine or apparatus or (2) physically transform underlying subject matter (such as an article or materials) to a different state or thing. (i.e. "machine-or transformation test"). If neither of these requirements is met by the claim, method is not a patent eligible process under § 101 and is rejected as being directed toward non-statutory subject matter.

There are two corollaries to the machine-or-transformation test. First, a mere field -of-use limitation in the preamble is insufficient to render an otherwise ineligible method claim patent-eligible. The machine or

Art Unit: 3695

transformation must impose meaningful limits on the method claims scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. Therefore, reciting a specific machine or a particular transformation of a specific article is an insignificant step, such as data gathering or outputting, is not sufficient to pass the test. Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See *Benson*, 409 U.S. at 71-72. As *Comiskey* recognized, "the mere use of the machine to collect data necessary for application of the mental process may not make the claim patentable subject matter." *Comiskey*, 499 F.3d at 1380 (citing *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir.1989)).

Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, nominal or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one.

As example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter being transformed, for example by identifying the

Art Unit: 3695

material being changed to a different state. (Diamond v. Diehr, 450 US 175, 184 (1981); Parker V. Flook, 437 US 584, 588 n.9 (1978); Gottschalk v. Benson, 409 US 63, 70 (1972); Cochrane v Deener, 94 US 780, 787-88 (1876)). Applicant is also directed to MPEP § 2173.05p, providing guidance with respect to reciting a product and process in the same claim and MPEP § 2111.02 [R3] providing guidance with respect to the effect of limitations within the preamble of a claim.

In reference to claims, the claims do not positively recite the other statutory class (thing or product) to which it is tied, by identifying the apparatus that accomplishes the method steps. For example, claim 57 recites *inter alia* the claim limits “determining a set of risk factors from a risk factor model; receiving or calculating a set of traded fund sensitivity coefficients . . . using a computer to calculate weights of securities . . . using a computer to calculate the estimated value for the traded fund based on the value of the proxy portfolio. It is unclear what is performing these method steps and as such it is broadly interpreted to encompass all means by which the claim limit can be performed (including a purely mental step performed by a human). To resolve this deficiency, it must be made clear what underlying apparatus is used to perform the recited method steps, particularly those that are considered a core/central part of what the applicant invented. Additionally, merely stating the underlying apparatus in the preamble is not sufficient. Further, if the method step is

Art Unit: 3695

- performed by software, it must be made clear that the software resides on a physical media and when read by a processor executes the method steps (all of which requires support in the specification). Note that the limits of claim 57 were used as an example of the deficiencies found throughout the claims. Claims 58, 59, and 95-97 also contain similar deficiencies which should be addressed during future claim amendments.
10. **Claim 56** is rejected under 35 U.S.C. 101 because the claimed invention is not directed to a statutory category. A “trade fund” is not recognized as belonging to one of the statutory categories of an “invention under 35 USC 101” (process, machine, manufacture, or composition of matter). The claim limits directed toward the body of the invention contain action which would constitute a method. However, based on the preamble and applicant’s arguments (pages 19 and 20) the claims are not interpreted as claiming a method (also see 35 U.S.C. 112 rejections for claim 56). The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. The claim limits clearly are not a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category.

Claim Interpretation - Intended Use or Intended Results

11. In determining patentability of an invention over the prior art, all claim limitations have been considered and interpreted as broadly as their terms reasonably allow. See MPEP § 2111.

Art Unit: 3695

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988

F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Pruter*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). See MPEP § 2111.

All claim limitations have been considered. Additionally, all words in the claims have been considered in judging the patentability of the claims against the prior art. The following language is interpreted as not further limiting the scope of the claimed invention. See MPEP 2106 II C.

Language in a method claim that states only the intended use or intended result, but the expression does not result in a manipulative difference in the steps of the claim. Language in a system claim that states only the intended use or intended result, but does not result in a structural difference between the claimed invention and the prior art. In other words, if the prior art structure is capable of performing the intended use, then it meets the claim. For example **claims 56, 57, 59, 95, and 97** recite the claim limits “using a computer to create a proxy portfolio having substantially the same sensitivity coefficients as the traded fund;”.

Further, the claims recite multiple claim limits which state ““using a computer” to perform an intended use. Such claims state the intended use of the computer. However, such claims do not structurally distinguish themselves from any prior art which shows a computer capable of allowing a human to perform such action (thus indicating that a general

Art Unit: 3695

purpose computer is needed and not a particular computer). Note that the claims do not indicate that the computer performs the actions, only that it is used to perform the actions.

Claim Interpretation - Preamble

12. According to MPEP 2111.02, if the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation"); *Kropa v. Robie*, 187 F.2d at 152, 88 USPQ2d at 480-81 (preamble is not a limitation where claim is directed to a product and the preamble merely recites a property inherent in an old product defined by the remainder of the claim); *STX LLC v. Brine*, 211 F.3d 588, 591, 54 USPQ2d 1347, 1350 (Fed. Cir. 2000). If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). **Claims 57**

Art Unit: 3695

and 95 recite a method which has the intended use “for calculating an estimated value for a traded fund without publicly disclosing the assets of the traded fund” and “for calculating an estimated value for an exchange traded fund without publicly disclosing the assets of the exchange traded fund”, respectively.

Claim Interpretation – “Whereby” (or “Wherein”) Clauses

13. **Claims 56-59 and 95-97** use the phrase “whereby” or “wherein”. A “wherein” clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim [MPEP § 2111.04]. 12. Claims 56-59 and 95-97 recite the claim limit (or equivalent) “wherein the proxy portfolio does not reveal the assets of the traded fund and the identities of the assets of the traded fund are not disclosed to an investor who trades shares of the traded fund on a secondary market, and wherein the assets of the traded fund are not publicly disclosed on a daily basis”. This is interpreted as statement of intended use. There is no positive recitation that the claim limits are performed, how they are performed, and by what apparatus (human, computer, ect ...). Also see Claim Rejections - 35 USC § 112 2nd rejection concerning omitted cooperative relationship between components / method steps.

Claim Interpretation – “traded funds”

14. Regarding claims 56 -59, Examiner has assumed a "traded fund" means a fund as described by Applicants as any type of investment instrument and is guided by Applicants' specification which says (page 12)
- "The invention provides systems and methods that allow trading of any fund while maintaining secrecy of the specific assets of the fund. While much of the following description is in terms of AMETFs, the funds traded using the systems and methods of the invention can include (and the term "fund" as used herein includes at least the following): any type of investment instrument including, for example, shares of mutual funds, unit investment trusts (UITs), closed-end funds, .grantor trusts, hedge funds, any investment company, or any other type of collective investment. Furthermore, while the examples provided herein demonstrate intra-day trading of fund shares on a stock exchange without disclosure of fund assets, the systems and methods of the invention are equally applicable to trading of secret-asset fund shares at any time on any venue, market, or exchange, for example, after-hours trading on a U.S.

Claim Interpretation – “exchange traded funds”

15. Regarding claim 95-97, Examiner notes that the "exchange traded fund" mentioned can be interpreted to be a fund traded on an exchange, rather than the specific entity "ETF" as used in the literature at the time of the invention, and is further so guided by Applicants' specification at pages 12-13
- "The invention provides structures for creating and redeeming AMETF shares that allow arbitrage, methods for publishing an intra-day asset value that can be used by investors to base negotiated prices, and portfolios that can be used by market liquidity providers and others to hedge risks from trading AMETF shares. The information provided by the invention need not include specific information about the specific fund holdings or information sufficient even to determine approximate fund holdings. Instead, the information should be sufficient to create 20 portfolios that mimic the behavior of AMETFs accurately enough to base negotiated prices of the AMETFs on and to hedge AMETF investment risks.
- In accordance with the invention, AMETFs may be organized as investment companies (or fund companies), which are companies that issue securities and whose primary business is investment. In a preferred embodiment, AMETFs may be open-ended, and thus issue shares that 25 may be redeemed by the investment company for their NAV. While AMFs

Art Unit: 3695

[sic] are currently not traded on secondary markets, the structures, systems, and methods described below can allow exchange trading. While most ETFs are open-end management investment companies, some ETFs are organized as UITs, and a similar organizational structure may be used for AMETFs. In an alternative embodiment, AMETFs may be organized as closed-end companies, which issue shares that are not redeemable by the fund company at all times, but rather are traded primarily on secondary markets. There are a number of ways in which the distribution structure of AMETF shares may be organized.

16. A careful examination of the current claims reveal that the [exchange] traded fund assets are not disclosed to an investor who trades shares of the fund, and those assets are not publicly disclosed or publicly disclosed on a daily basis. That merely describes a type of fund, e.g., an "alternative investment" fund. Second, there is a proxy portfolio having substantially the same sensitivity coefficients, and which does not reveal the fund assets. Nowhere is it said that the entity creating the proxy portfolio does not know the composition of the "target" fund, and indeed the specification clearly implies the opposite, that the creator of the proxy portfolio does know all of the assets and trades of the underlying portfolio "without public disclosure of the underlying portfolio". So the claims only require that the fund have assets unknown over some period (depending which particular claim is being addressed). That the proxy does not reveal the traded fund assets is a redundant limitation, as it is already known and subsumed in the broader statement already made that the fund's assets are not publicly disclosed or publicly disclosed on a daily basis. And, as noted above, it is impossible.

Claim Interpretation – “risk factor models”

17. Regarding the risk factor model, Applicants have admitted that it is prior art, and cites numerous prior references:
"Figure 4 is a specific embodiment of the method depicted generally in Figure 3, and involves an economic factor model. The method of figure 4 involves selection of a group of predetermined economic risk factors 405. Analysis of investment risk through economic risk factors is a well studied art, and has produced many different successful pricing models ...APT...Berry et al., ..1988 Fama et al 1993..." etc.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 56-59 and 95-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dembo (U.S. Patent No. 5799287) in view of Kiron (PGPub Document No. 20020143676) or alternatively Kiron (PGPub Document No. 20020143676) in view of Dembo (U.S. Patent No. 5799287).

As per claim 56, Dembo teaches a **traded fund** (*a traded fund* (where Applicants' specification's definition of "fund" and Applicants' own usage of "portfolio" are used - Dembo: "The method then uses the predefined set of available market instruments to identify a set of transactions that will create a replicating portfolio that will achieve the maximum risk-adjusted profit... The present invention provides an improved method and apparatus for portfolio replication which seeks to reach an optimal balance between expected profit and the risk involved in attaining that profit. In one embodiment, the present invention identifies a set of transactions required to achieve an optimal hedge by analyzing the portfolio replication according to a stochastic model which takes into account the trade-off between the cost of the hedge and the quality of protection it offers The

Art Unit: 3695

present invention adopts a constructive approach that explicitly specifies the trades that a portfolio manager should undertake to replicate a target portfolio." Applicants have a special definition of "fund" which certainly includes such a portfolio: "the term "fund" as used herein includes at least the following): any type of investment instrument including, for example, shares of mutual funds, unit investment trusts (UITs), closed-end funds, grantor trusts, hedge funds, any investment company, or any other type of collective investment". Furthermore, a portfolio whose holding is the fund is also included. Furthermore, the specification uses the same word, "portfolio", in describing the invention; e.g. : "risk exposure calculation may be based on a function of the pricing data for the AMETF portfolio" and the "methods shown in Figures 1 and 2 provide measures of intra-day values throughout the trading day without public disclosure of the underlying portfolio") whose assets are not publicly disclosed on a daily basis (see at least references cited at column 2 lines 54-60, in all their generality, as referred to in item 15 above, expressly incorporated by reference),

storing the set of fund sensitivity coefficients on computer readable media (see at least column 5 lines 8-10, column 7 lines 3-67, claims 1-12)

All of the limits of Claim 56 are addressed in Claims 57, and is therefore rejected using the same prior art and rationale.

As per claim 57, Dembo teaches a **method** ([claims 1-5]) **for calculating an estimated value for a traded fund without publicly disclosing the assets of the traded fund** (see "traded fund" in Claim 56. Note that even though prior art has been applied, the claim limit "for calculating an estimated value for a traded fund without publicly disclosing the assets of the traded fund" is a statement of intended use and, as such, is given no patentable weight.), **comprising: determining a set of risk factors from a risk factor model** (see at least column 5 lines 18-26); **receiving or calculating a set of traded fund sensitivity coefficients** (see at least column 5 lines 7-38, column 7 lines 23-25, Figure 1, claims 1(c), 6, 7, 11-12), **wherein each traded fund sensitivity coefficient specifies the exposure of the traded fund to one of the risk factors in the set of risk factors** (see at least column 5 lines 7-38, column 7 lines 23-25, Figure 1, claims 1(c), 6, 7, 11-12); **using a computer to calculate weights of securities to create a proxy portfolio with substantially the same sensitivity coefficients as the traded fund** (see at least column 2 line 44 - column 5 line 26, especially column 3 lines 37-44, Figure 1, claim 11 "a portfolio manager controlling a given portfolio (i.e. a target portfolio) has the objective of constructing a replicating portfolio that behaves identically to the target portfolio under all possible future states of the world"; "a perfect replication will produce a perfect hedge for the target portfolio"; column 4 lines 38-42, "Given a target return distribution, the

Art Unit: 3695

objective for a portfolio manager is to structure a replicating portfolio that tracks the target return (or any other attribute, such as volatility) under all possible scenarios"); **and using a computer to calculate the estimated value for the traded fund based on the value of the proxy portfolio**, (see at least column 32 lines 60-63, column 3 lines 5-11, column 5 lines 29-32). Dembo also teaches or implies that the **proxy portfolio does not reveal the assets of the traded fund and the identities of the assets of the traded fund are not disclosed to an investor and wherein the assets of the traded fund are not publicly disclosed on a daily basis**. (see at least column 32 lines 60-63, column 3 lines 5-11, column 5 lines 29-32), *wherein the proxy portfolio does not reveal the traded fund assets and the identities of the traded fund assets are not disclosed to an investor who trades shares of the traded fund* (see at least" Given a target return distribution, the objective for a portfolio manager is to structure a replicating portfolio that tracks the target return (or any other attribute, such as volatility) under all possible scenarios" where it is clear that only the target return or other attribute is known and the possible scenarios clearly include known sensitivities and unknown identities of assets to all investors and members of the public. That no knowledge of the target's holdings are ever stated or used in the reference's method makes clear that this negatively stated limitation is met). However, it is not clear the traded funds are traded on **the secondary market**.

Kiron teaches **a method for calculating an estimated value for a traded fund without publicly disclosing the assets of the traded fund** ([claims 146-149]. Note that even though prior art has been applied , the claim limit "for calculating an estimated value for a traded fund without publicly disclosing the assets of the traded fund" is a statement of intended use and, as such, is given no patentable weight.), **comprising: using a computer to calculate weights of securities to create a proxy portfolio with substantially the same performance as the traded fund** (a second type of security synthetically replicates the performance of the targeted traded fund [¶21] [¶50] [¶55, lines 1-6] [¶61-62]); **and using a computer to calculate the estimated value for the traded fund based on the value of the proxy portfolio** ([¶55-57] [claim 146-149]), **wherein the proxy portfolio does not reveal the assets of the traded fund and the identities of the assets of the traded fund are not disclosed to an investor who trades shares of the traded fund on a secondary market, and wherein the assets of the traded fund are not publicly disclosed on a daily basis** (the price (value) of the outstanding shares of the exchange traded fund is reported in real time [¶55-57] [claim 146-149]). Kiron does not indicate that the **set of risk factors** come from a **risk factor model** or the use of **traded fund sensitivity coefficients**.

Art Unit: 3695

It would have been obvious to one skilled in the art at the time of the invention to have combined the teachings of Dembo and Kiron to achieve the claimed invention. Kiron provides Dembo with the specifics of actually trading and displaying real time values for an exchange traded fund in a secondary market (actual exchange). Dembo provides the invention of Kiron with the use of risk factors derived from a risk factor model and the use of traded fund sensitivity coefficients. The motivation to combine the references would include the ability to trade a futures contract on both a securitized fund share and an index of securitized fund shares with linked derivative securities. In addition, the present invention solves a long existing but unsolved and unrecognized need. Many investors, both professional and non-professional own multiple mutual funds in an effort to diversify their investment portfolios. An index of open end mutual funds would allow greater diversification, lower transaction costs, expanded investment choices and the ability to measure their fund performance against a relevant benchmark index. The index could be calculated many different ways with a great deal of flexibility: equal price weighted, capitalization weighted, or geometrically weighted, depending upon the need.

As per claim 58, the rejection of claim 57 has been addressed. Dembo does not teach **publicly disclosing the estimated value for the traded fund periodically throughout the day**.

Kiron teaches **publicly disclosing the estimated value for the traded fund periodically throughout the day** (the price (value) of the outstanding shares of the exchange traded fund is reported in real time [¶55-57] [claim 146-149]).

It would have been obvious to one skilled in the art at the time of the invention to have combined the teachings of Dembo and Kiron to achieve the claimed invention. Kiron provides Dembo with the specifics of actually trading and displaying real time values for an exchange traded fund in a secondary market (actual exchange). Dembo provides the invention of Kiron with the use of risk factors derived from a risk factor model and the use of traded fund sensitivity coefficients. The motivation to combine the references would include the ability to trade a futures contract on both a securitized fund share and an index of securitized fund shares with linked derivative securities. In addition, the present invention solves a long existing but unsolved and unrecognized need. Many investors, both professional and non-professional own multiple mutual funds in an effort to diversify their investment portfolios. An index of open end mutual funds would allow greater diversification, lower transaction costs, expanded investment choices and the ability to measure their fund performance

Art Unit: 3695

against a relevant benchmark index. The index could be calculated many different ways with a great deal of flexibility: equal price weighted, capitalization weighted, or geometrically weighted, depending upon the need.

As per claim 59, All of the limits of Claim 59 have been previously addressed in Claims 56 and 57, and is therefore rejected using the same prior art and rationale.

As per claim 95, All of the limits of Claim 95 have been previously addressed in Claims 58, and is therefore rejected using the same prior art and rationale.

As per claim 96, All of the limits of Claim 95 have been previously addressed in Claim 56 and 57, and is therefore rejected using the same prior art and rationale.

As per claim 97, All of the limits of Claim 95 have been previously addressed in Claims 58, and is therefore rejected using the same prior art and rationale.

Response to Arguments

20. Applicant's arguments with regards to claims 56-59 and 95-97, filed 11/06/2009 have been fully considered but they are not persuasive.
21. APPLICANT REMARKS CONCERNING Claim Rejections - 35 USC § 101 (pages 19-20): The applicant contends that Claim 56 was rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. Applicants request reconsideration. The "traded fund" of claim 56 clearly falls under the statutory "manufacture" class. Applicants question the legal authority for rejecting a non-method claim under § 101. The Supreme Court has held that statutory subject matter includes "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

Art Unit: 3695

Furthermore, the claim is clearly tied to a "machine," making it eligible subject matter under the Federal Circuit's Bilski test. In re Bilski, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008).

22. EXAMINER'S RESPONSE: The examiner respectfully disagrees with the applicant's arguments. Regarding claim 56, a "trade fund" is not recognized as belonging to one of the statutory categories of an "invention under 35 USC 101" (process, machine, manufacture, or composition of matter). The claim limits directed toward the body of the invention contain action which would constitute a method. However, based on the preamble and applicant's arguments (pages 19 and 20) the claims are not interpreted as claiming a method (also see 35 U.S.C. 112 rejections for claim 56). The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. The claim limits clearly are not a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. Regarding claims 57-59 and 95-97, the claims do not positively recite the other statutory class (thing or product) to which it is tied, by identifying the apparatus that accomplishes the method steps. As such, 35 USC § 101 rejections for claims 56-59 and 95-97 are maintained by the examiner.

Art Unit: 3695

23. APPLICANT REMARKS CONCERNING Claim Rejections – 35 USC § 102 and 103 (pages 19-20): The applicant has argued issue regarding the prior art of record directed at the previous office action.
24. EXAMINER'S RESPONSE: Applicant's arguments with respect to prior art have been considered but are moot in view of the new ground(s) of rejection. The rejection above serves as the examiners response to the applicant's arguments.
25. Therefore, in view of the above reasons, Examiner maintains rejections.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Pollock whose telephone number is 571 270-1465. The examiner can normally be reached on 7:30 AM - 4 PM, Mon-Fri Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chuck Kyle can be reached on 571 272-5233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3695

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GAP

02/11/2010

/Gregory Pollock/
Examiner, Art Unit 3695

Gregory A. Pollock

/Thu Thao Havan/
Primary Examiner, Art Unit 3695